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Serial Number: 10/658476

Appn. Filed: 9.9.03

Applicant(s): WILLIAM FREDERICK FATHAUER, JR.

Appn. Title: SOLE INVENTOR

Examiner/GAU: _____

Mailed: 11.4.03

At: SCOTTSDALE, AZ.

Information Disclosure Statement

Commissioner of Patents and Trademarks
Washington, District of Columbia 20231

Sir:

Attached is a completed Form PTO-1449 and copies of the pertinent parts of the references cited thereon.
Following are comments on any non-English language references pursuant to Rule 98:

ENCLOSED IS INFORMATION DISCLOSURE STATEMENT ON
MY PATENT APPLICATION ENTITLED "~~PATENT~~
SUTURE APPARATUS AND METHOD
FOR STERNAL CLOSURE

FILED 9.8.03.

~~I AM AWAITING SERIAL NUMBER ETC.~~

(EXCUSE ME - FOUND IT)

10/658476

LIST OF PRIOR ART CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT

WILLIAM FREDERICK FATHAUER, JR.

FILING DATE

9.9.03

GROUP

U.S. PATENT DOCUMENTS

INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	5342397	1994	RONALD GUIDO			
AB	5089012	1992	PHILIPPE PROU			
AC	6206755	2001	SAMSEL SCOTT			
AD	5968077	1999	ALEX WOTCIECHOWKZ			
AE	2003153	9/17/2003	KOSEKI TOMOAKI			
AF	6302899	2001	WAYNE GIFFIN ET. AL			
AG	6051007	2000	TROY CHAPMAN			
AH	6030410	2000	ROBT. ZURBRUEGG			
AI	4730615	1988	ALFRED VASCONCELLOS			
AJ	2003083	6/9/2003	ARCHIBALD MILLER			
AK						

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
AL	565966	1944	GB				
AM	0694288		EP				

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	
	AS	

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Information disclosure statement

The search has been conducted by computer using the U.S patent and trademark office's web site, dating from 1976 to the present, the IBM sponsored site dating from 1971 to the present and the European site, espacenet, dating from 1920 to the present. Since sternotomy procedures in significant numbers date from the early 1950s, the time frames for search seem adequate.

The prior art patent literature discloses a number of surgical devices relating to the present search, including surgical needles, surgical sutures as well as methods and apparatuses designed to close a surgically divided sternum, all of which seem to differ substantially from the art disclosed in the present patent application.

Note, for example U.S. patent no. 5,342,397[✓] entitled CUTTING EDGE AND TAPERCUT NEEDLES HAVING A BLUNT TIP. That disclosure describes a needle for cutaneous (non boney) tissues, designed specifically to protect the operator's hand from needle puncture.

U.S. patent no, 5,089,012[✓] entitled SURGICAL SUTURE, IN PARTICULAR FOR STERNOTOMY CLOSURE discloses a typical prior art monofilament surgical suture, incorporating a single, curved surgical needle.

G.B. patent no. 565,966[✓] entitled IMPROVEMENTS IN OR RELATING TO SURGICAL SUTURES discloses a suture formed from a

metallic material, hardened, tempered and sharpened at one or both ends, thus forming an integral suture:needle.

Two separate patents, EP 0694288 and U.S. 6,206,755 describe similar methods of manufacture of needles with blunt tips. Both methods involve placing sharpened needles into an abrasive, tumbling medium, whereby they are transformed into blunt tipped needles. No mention is made of the production of straight needles or of production of needle tips of a precise diameter.

U.S. patent no. 5,968,07 entitled DOUBLE WIRE STERNOTOMY SUTURE discloses a wire suture with first and second ends. A first end is connected to a curved surgical needle. A second end is welded to a side of the suture near the needled end, comprising a loop. On passage through the sternal edges, a double suture results, providing greater strength as well as other advantages.

U.S. patent no. 2,003,153,947 entitled STERNUM SUTURE MATERIAL AND ITS MANUFACTURING METHOD discloses methods of manufacture of either metallic or bioabsorbable woven suture with straight surgical needles. It further discloses a method for passage of the sutures through the sternum, whereby the sternum is retracted upward, using a hook type retractor and a piercing tool is used to make holes for suture passage. The needles and sutures are then passed through the holes.

U.S. patent no. 6,302,899 entitled SYSTEM, METHOD AND APPARATUS FOR STERNAL CLOSURE discloses a system for sternal

closure, whereby a grommet is inserted into the sternum on each opposing side, at the site for proposed suture placement. The sutures are then passed through the grommets, thereby reinforcing the sternal closure.

U.S. patent no. 6,051,007 entitled STERNAL CLOSURE DEVICE AND INSTRUMENTS THEREFOR discloses a device comprising paired clamps and paired grasping members which are slideably connected through tubular portions with locking capability, thereby holding the sternal edges in opposition.

U.S. patent no. 6,030,410 entitled STERNAL CLOSURE TECHNIQUE AND KIT FOR PERFORMING SAME discloses a method to reenforce each trans-sternal wire suture utilizing staples placed into the sternum at each site of proposed suture placement. The sutures are then placed in a position lateral to the staples to thereby reenforce the closure.

U.S. patent no. 4,730,615 entitled STERNUM CLOSURE DEVICE and U.S. patent no. 2,003,083,694 entitled METHOD AND APPARATUS FOR CLOSING A SEVERED STERNUM are rather large and somewhat complicated devices that bear no similarity to the invention being disclosed. They are included for sake of completeness and copies of their abstracts are included for your review.

Insofar as understood, none of the disclosed prior art appears to teach, hint or suggest an apparatus with the capability of positioning a unique suture in a position beneath the sternum while concurrently driving a unique, straight, blunt tipped surgical needle through the sternum ,

whereby the needle and suture become lockably engaged, thus permitting
extraction of the suture to the top surface of the sternum.